

Work Order ID 154423

Tuesday, December 13, 2016 7:57:43 AM

154423

Page 1

Item ID: D4711-043

Revision ID:

Item Name: Expandable Pin Assembly

Start Date: 12/13/2016 Start Qty: 10.00

Required Date: 12/27/2016 Req'd Qty: 10.00

Reference:

Accept
DEC 16 2016

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

10

10

DEC 13 2016

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4711	D

100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 346666
Possible supplier: QRP INC
Supplier P/N: 09094-QADPC416
Material release note is required

25

DEC 16 2016

DAS
13
9-89

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.03

Packaging

25x8p 17-03-60

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

25

DAS
38
9-89

MAR 07 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 154423

Tuesday, December 13, 2016 7:57:43 AM

154423

Page 2

Item ID: D4711-043 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Expandable Pin Assembly
Start Date: 12/13/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 12/27/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Shao</u>	0.00				<u>JS</u>			
130									
Packaging	Memo	0.02							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.17							
Quality Control									

17/3/8 JA

DAS 21 9-89 MAR 05 2017

DAS 21 9-89 MAR 08 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, December 13, 2016 7:57:41 AM

Page 1

Work Order ID: 154423

154423

Parent Item: D4711-043

D4711-043

Parent Item Name: Expandable Pin Assembly

Start Date: 12/13/2016

Required Date: 12/27/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:B 12.10.16 AS PER DWG REV.A DD VERF:JFS IPP
REV:C 16.01.05 AS PER DWG REV.D DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
09094-QADPC416		Purchased		No			Each	0.0000		10			
09094-QADPC416									**	25*			
Expandable Pin Assembly										SP 1703-6			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

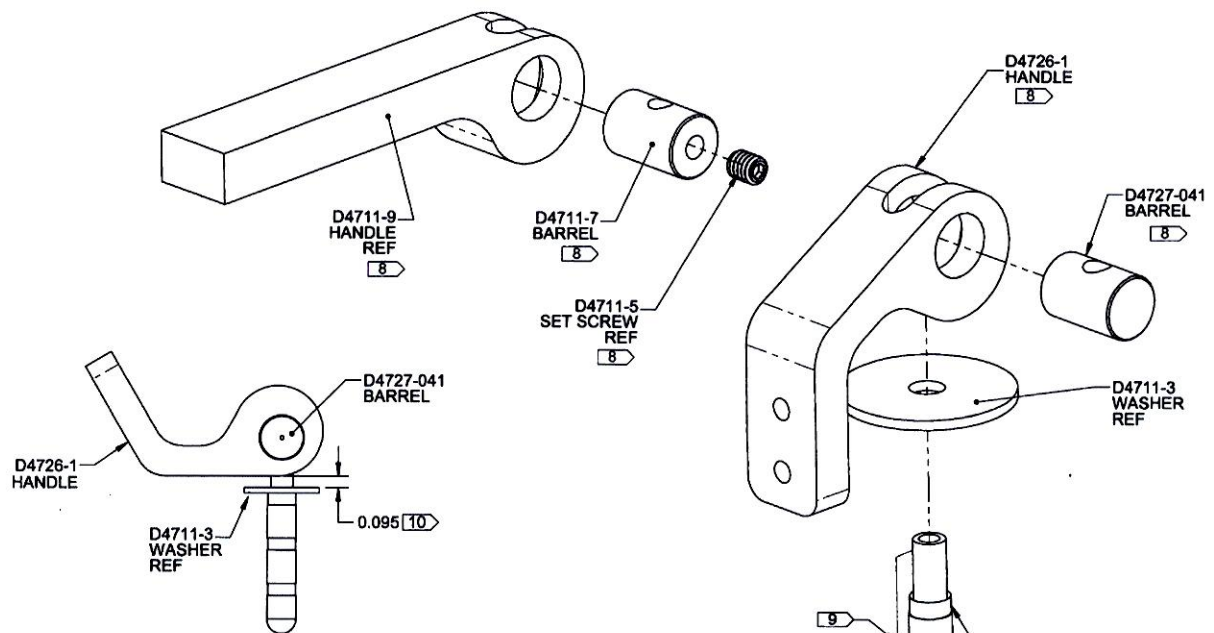
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____						
Misidentified	☐	Past Due	☐							

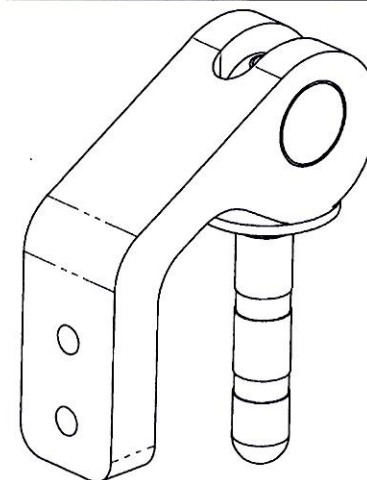
ITEM	QTY	P/N	DESCRIPTION
	X	D4711-041	EXPANDABLE PIN ASSY, MODIFIED
1	1	D4711-043	EXPANDABLE PIN ASSY
2	1	D4726-1	HANDLE
3	1	D4727-041	BARREL
4	1	D4749-1	SPACER



D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(OPEN POSITION)

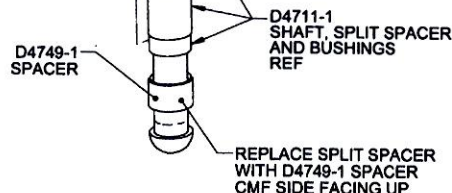
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.7
- 7) WEIGHT: 0.22 lbs
- 8) REPLACE D4711-9 HANDLE WITH DART D4726-1 HANDLE.
REPLACE D4711-7 BARREL WITH DART D4727-041 BARREL.
REPLACE BOTTOM SPLIT SPACER WITH D4749-1 SPACER.
DISCARD D4711-5 SET SCREW, D4711-7 BARREL, D4711-9 HANDLE, BOTTOM SPLIT SPACER.
- 9) WHEN INSTALLING D4749-1 SPACER, ENSURE THAT ALL RETAINED SPLIT SPACERS AND BUSHINGS REMAIN IN THEIR ORIGINAL SEQUENCE AND ORIENTATION.
- 10) INSTALL THE D4711-1 SHAFT WITH THE ASSEMBLY IN THE OPEN POSITION, UNTIL A GAP OF 0.095" EXISTS BETWEEN THE D4711-3 WASHER AND THE D4726-1 HANDLE. DO NOT OVERTIGHTEN THE SHAFT INTO THE D4727-041 BARREL.



D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(CLOSED POSITION)

DEC 13 2016
010:154423
DAS
13
9-89



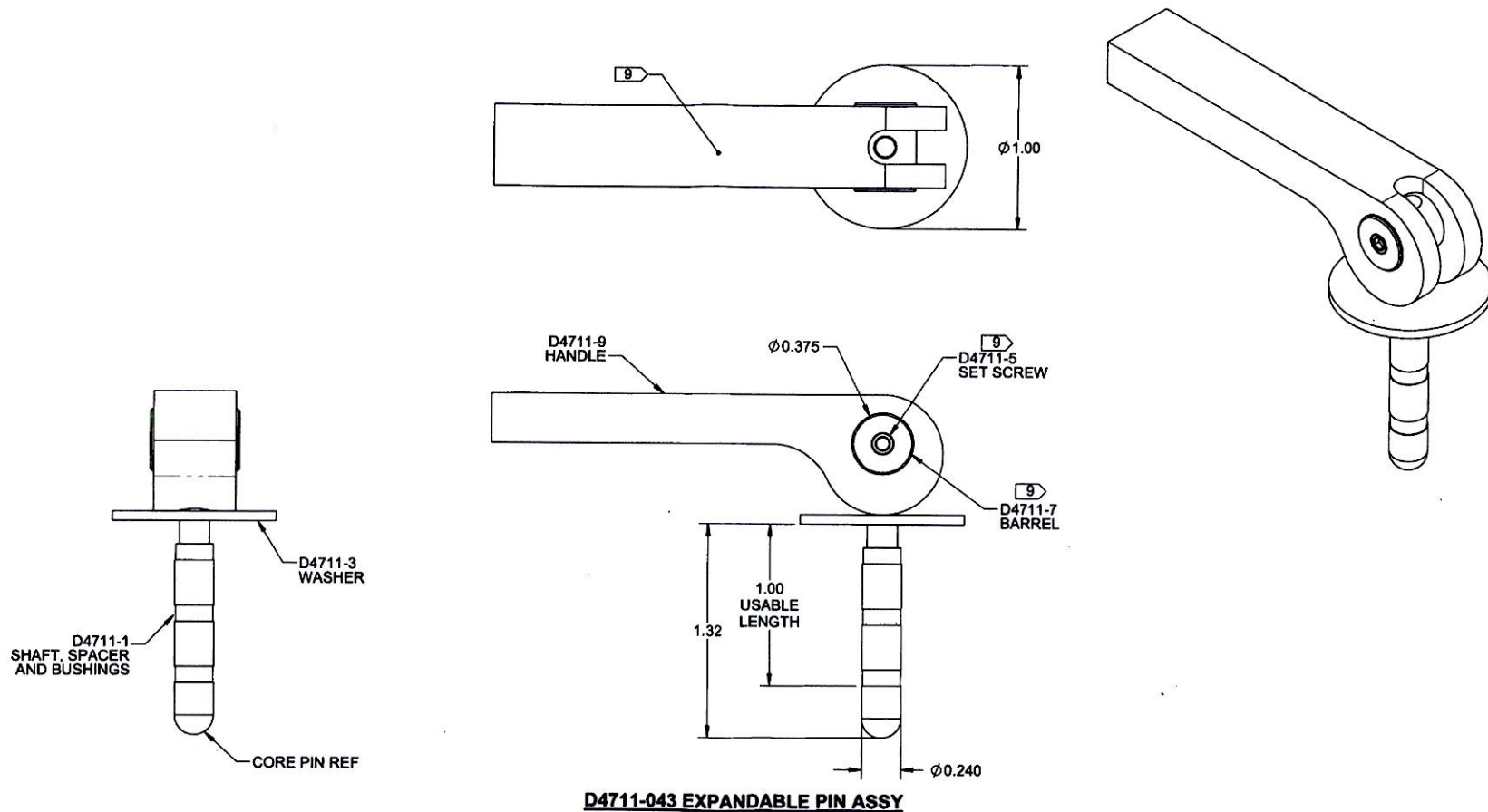
REPLACE SPLIT SPACER
WITH D4749-1 SPACER
CMF SIDE FACING UP

RELEASED
2016-01-05
ELN 15-614

D	GENERAL UPDATE MCMASTER CARR PART NO LONGER AVAILABLE SEE PREVIOUS REVISION AND PARTS 439 FOR DETAILS. SPLIT RINGS, CORE PIN & BARREL NOW 17-4PH H900 CONDITION.	AJS	15.07.22
C	REVISED NOTE (A4-1) & NOTE 8. ADDED NOTE 10. PICTORIAL UPDATE. ADDED VIEW 88-1.	AP	13.02.12
B	ADDED D4749-1 SPACER, MODIFIED NOTES 8 AND 9	AP	12.11.23
A	NEW ISSUE	RP	12.09.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AJS	KENT, WA	
CHECKED	CP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4711	SHEET 1 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	ADJUSTABLE DIAMETER PIN	NTS
DATE	15.07.22	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

APPROVED

SPECIFICATION CONTROL DRAWING



D4711-043 EXPANDABLE PIN ASSY

NOTES:

- 1) MATERIAL: CORE PIN, SPLIT RINGS AND BARREL: STAINLESS STEEL 17-4 PH CONDITION H900 PER AMS 5643
- 2) FINISH: N/A
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.17 lbs
- 8) SUPPLIER: QRP INC, 2307 MERCANTILE DR. N.E., LELAND, NORTH CAROLINA, 28451. P/N: 09094-QADPC416
- 9) HANDLE, BARREL AND SET SCREW TO BE DISCARDED AT NEXT HIGHER ASSEMBLY

RELEASED
2016-01-05

APPROVED

DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AJS	KENT, WA	
CHECKED	CP	DRAWING NO.	REV. D
MFG. APPR.	JLM	D4711	SHEET 2 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	ADJUSTABLE DIAMETER PIN	NTS
DATE	15.07.22	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34661**

Purchase Order Date 12/16/2016 10:18:38 AM

PO Print Date 12/16/2016

Page Number 1 of 2

Order From :
ROYAL BANK VISA
XXX
XX, X

VU-ROY001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

DEC 16 2016
E-MAILED

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

COD

USD

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	09094-QADPC416 AS PER DWG D4711 REV. D B154423	Expandable Pin Assembly	2/24/2017 Yes 2/24/2017	FN	25.00 Each	\$77.41	\$1,935.25
						Line Total:	\$1,935.25
2	71401-45	PROCUREMENT QUALITY CLAUSES	2/24/2017 No 2/24/2017		1.00	\$0.00	\$0.00
Procurement Quality Clauses A005 right of entry A016 personnel qualification A026 certification of material conformance A040 notification of quality escape A041 quality management system A042 dart notification be supplier A043 retention of quality documents							

Soft-03-6

PO Instructions: QRP INCORPORATED

Note:

12/16/2016

Invoice

Page 1

FROM

Tax ID/EIN/VAT No.:

Contact Name: Mark Kelly
QRP, Inc
2307 Mercantile Drive

LELAND, NC 284514065

United States
Phone: 9103710700

Waybill Number: 1Z5E97W16871862663
Shipment ID: 5E97W1NRWMW



Date: 21/FEB/2017
Invoice No.: 25 PCS PART# QADPC416
Purchase No.: ORDER# PO34661
Terms of Sale (Incoterm):
Reason for Export: Sale

SHIP TO

Tax ID/VAT No.:

Contact Name: CHANTAL LAVOIE
DART AEROSPACE
1270 ABERDEEN ST

HAWKESBURY, ON K6A1K7

Canada
Phone: (613) 632-9577

SOLD TO INFORMATION

Tax ID/VAT No.:

Contact Name:
Same as Ship To

Phone:

Units	U/M	Description of Goods/Part No.	Harm. Code	C/O	Unit Value	Total Value
25	NMB	ADJUSTABLE DIAMETER PINS QADPC416		US	77.41	1,935.25 USD

Split 03-B.

Additional Comments:

Declaration Statement:

I hereby certify that the information on this invoice is true and correct and the contents and value of this shipment is as stated above.

Shipper: *B. Bell* **Date:** *2/21/17*

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited.

Invoice Line Total:	1,935.25
Discount/Rebate:	0.00
Invoice Sub-Total:	1,935.25
Freight:	0.00
Insurance:	0.00
Other:	0.00
Total Invoice Amount:	1,935.25

Total Number of Packages: 1 **Currency:** USD
Total Weight: 3.0 LBS

Certificate of Compliance


QRP[®], INC.

 a **CAM[™]** Company

 2307 Mercantile Drive, N.E. , LELAND, NC , 28451
 (910) 371 - 0700

PACKING LIST
 SHIPPER
2085032

Customer No:	167671
Our Order:	1662363
Date Order:	12/16/2016
Customer P.O. No:	PO34661
Ship Via:	UPS Ground Collect

Bill To:

 Dart Aerospace
 1270 Aberdeen St
 Hawkesbury ON K6A 1K7
 Canada

Ship To:

 Dart Aerospace
 1270 Aberdeen St
 Hawkesbury ON K6A 1K7
 Canada

FOB: Free On Board - Origin

Total Quantity Shipped: 25

Line	Item Number	Revision Number	Customer Reference Number	Lot ID	Quantity Shipped
1.000	QADPC416 QADPC416 QC A005 A016 A026 A040 A041 A042 A043			567096	25

It is hereby certified that the articles identified above are in conformance with the indicated drawings and specifications.

It is further certified that the material described above has been inspected and tested as stated or required in these specific drawings, that such specimens or samples as have been tested were taken from the lot described and that the material meets all applicable requirements.

Passivation, if required, was performed in accordance with AMS 2700 Method 2 (E) & ASTM A967/A967M (13). Passivation was verified using 24 hr. water immersion testing in conjunction with copper sulfate testing, when permitted.

Appropriate test reports and or certificates are on file for your review and verification upon request. Equipment containing mercury or mercury compounds has not been used for fabrication, assembly, packaging or installation of parts or assemblies on this order.

Manufactured in the U.S.A. Raw materials melted in the U.S.A. or qualifying country. Compliant with all applicable Quality clauses and all applicable sections of DFARS 252.225.

Authorized Quality Representative

 Director of Quality, QRP, Inc
 Steve Wetzel